Achieving High Penetrations of PV

California PUC Rule 21 and Hawaii PUC Rule 14H

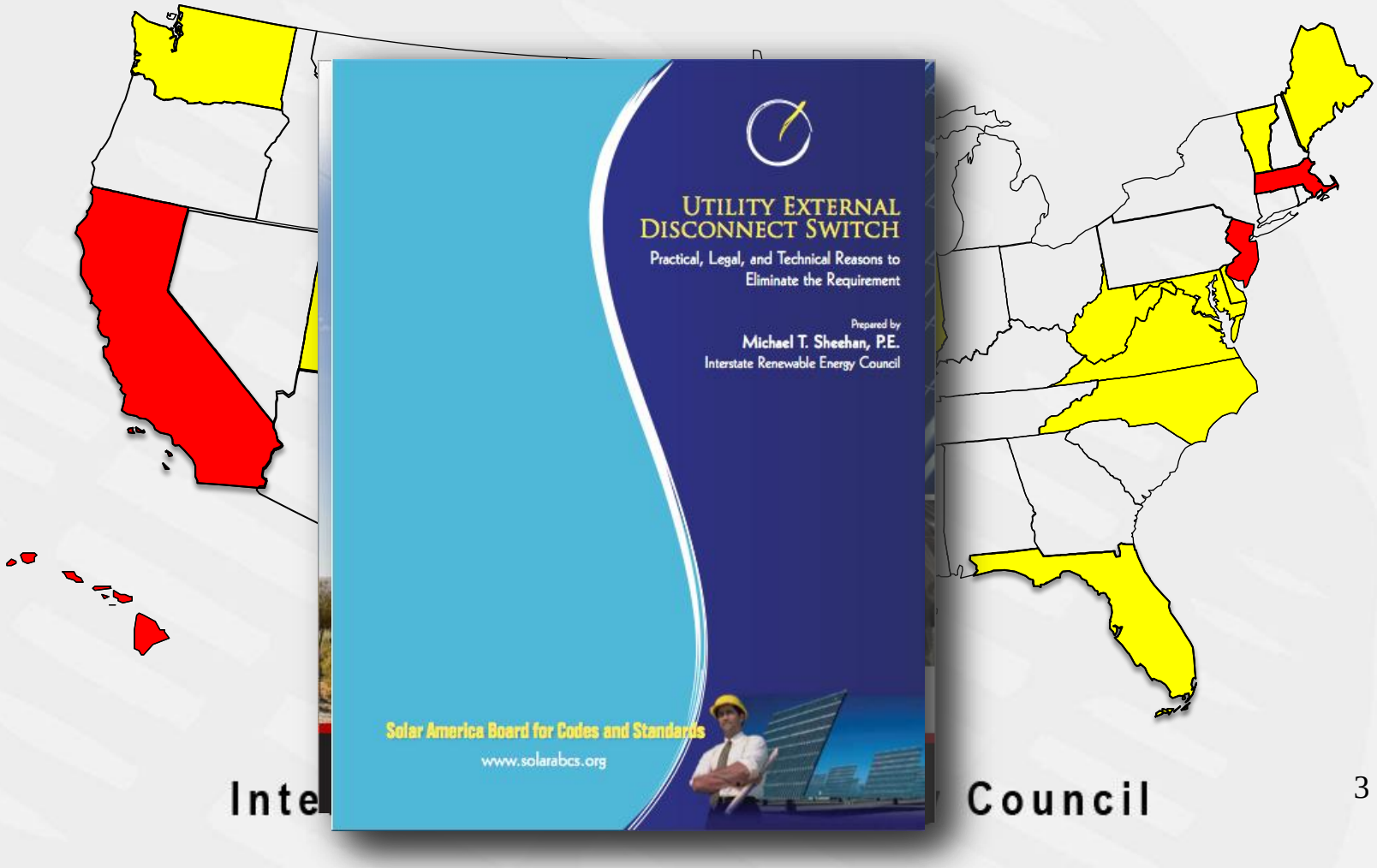
Kevin T. Fox

September 14, 2012

Solar Power International – Orlando, FL

What does IREC do?

IREC



Inte Council

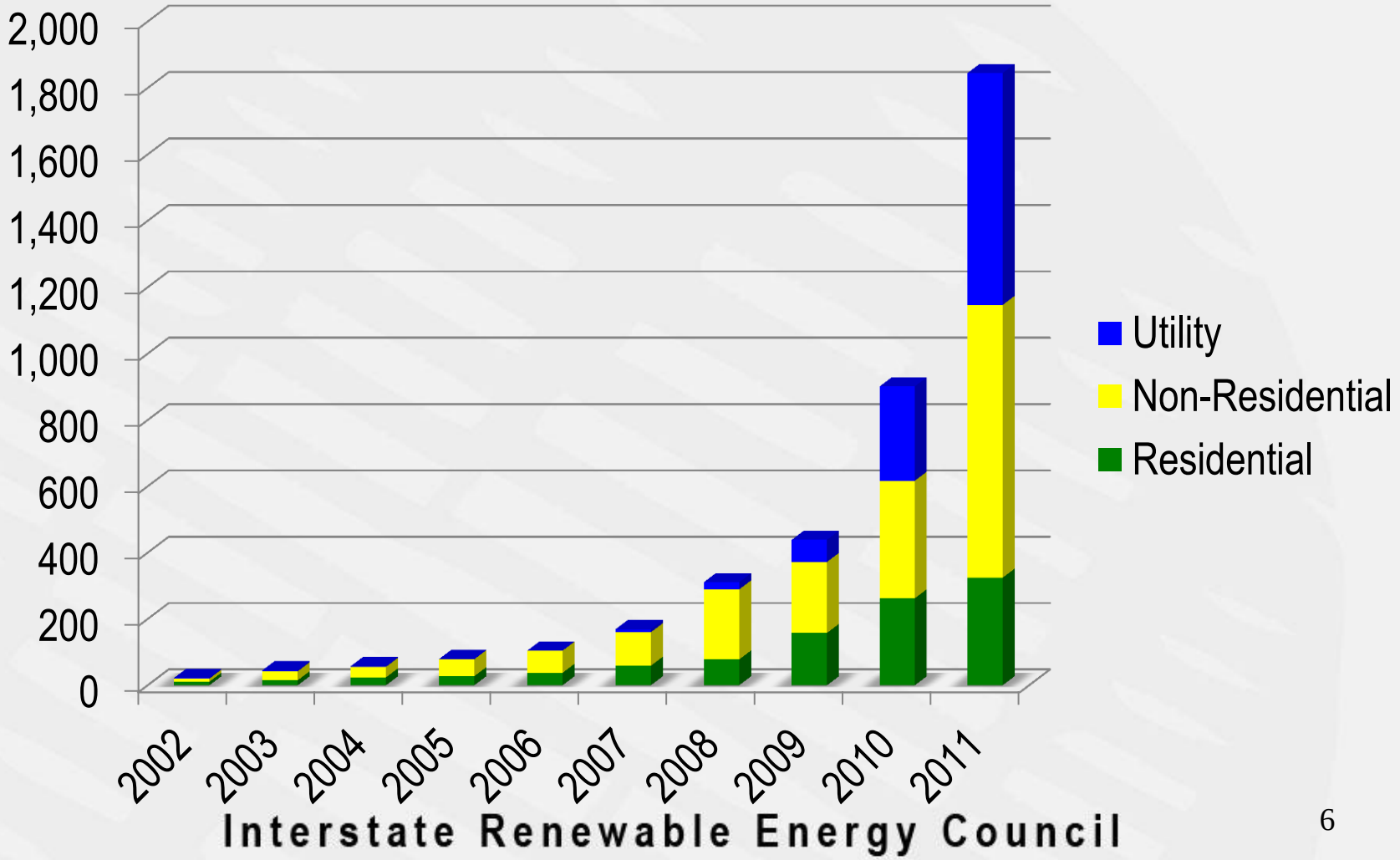
We need to fundamentally rethink how interconnection is accomplished

Jon Wellinghof: Chairman of the Federal Energy Regulatory Commission

"It's going to be a race between the two types of renewable resources,"

"Right now, I'd put my money on distributed resources."

IREC


2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Utility
Non-Residential
Residential
Interstate Renewable Energy Council

SEPA 2011 Utility Solar Rankings Report

- "In 2011, utilities interconnected over 62,500 PV systems, 89% of which were residential homes."
- "Thirteen utilities interconnected more than 1,000 PV systems and 22 interconnected more than 500 systems."
- "To put this in perspective, about 350 non-solar power plants (> 1 MW) were expected across the entire U.S. in 2011."
- "Conservative forecasts indicate that this number will grow to more than 150,000 interconnections in 2015."

Utilities should plan to accommodate PV the way they plan to serve load.

Here's How We Do This

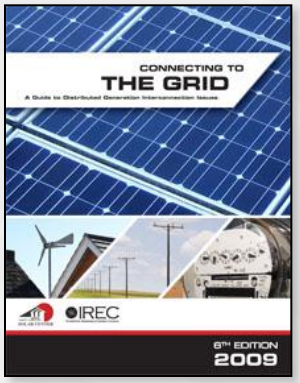
- First, accommodating PV should be a matter of proactive distribution planning.
- Second, PV growth must be taken into account in transmission system planning to avoid the potential for massive stranded costs and unnecessary impacts on the environment.
- Third, we need leadership from the people speaking here today on updating and streamlining procedures and requirements for interconnecting a PV generator at high penetrations.

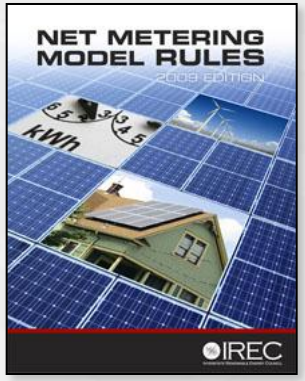
California and Hawaii are taking significant steps to better integrate high penetrations of PV into utility distribution systems

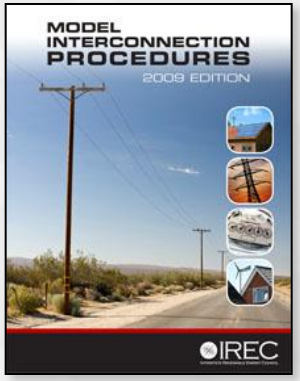
There is a win-win opportunity here for utilities and the solar industry

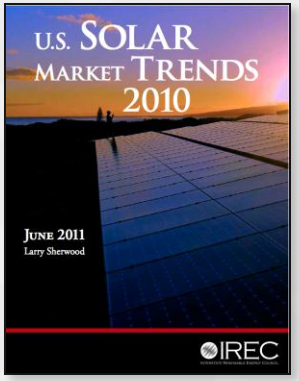
IREC Resources

www.irecusa.org









Kevin Fox

kfox@irecusa.org